

2011 POPULATION ESTIMATE FOR THE CITY OF HIGH POINT

April 6, 2011

The Planning and Development Department's population estimate for the City of High Point as of April 1, 2011 was developed using five of the seven methodologies listed below and described on the following pages. The remaining two methods were found to be not applicable with respect to this year's population estimate, because they were inconsistent with the 2010 Census figures released earlier this year. The five methods used produce population figures ranging from a high of 107,067 to a low of 104,614. The population figures derived from the methods employed in the 2011 estimate are listed below:

- Method 1 ---- 105,455
- Method 2 ---- 105,647
- Method 3 ---- 99,048 (Not Applicable)
- Method 4 ---- 107,067
- Method 5 ---- 99,576 (Not Applicable)
- Method 6 ---- 104,614
- Method 7 ---- 106,431

2011 POPULATION ESTIMATE – 105,843

The above estimate of <u>105,843</u> represents the average of the five applicable methods used in this report. It suggests that High Point has been growing at an average annual rate of 2.1% since the 2000 Census was taken on April 1, 2000, at which time the City's population was reported to be 85,839, and by an annual rate of 1.4% since the 2010 Census taken last year at which time the City's population was reported to be 104,371.

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Method 1 - New Residences:

This method relies on residential building permits and demolition permits issued by the Inspection Services Division of the Planning and Development Department from April 1, 2000 through March 31, 2011 to provide the net number of new housing units (residences) and new group quarters facilities approved for construction within the city since the 2000 Census. The number of new housing units was then reduced by the 13.2% vacancy rate reported by the U.S. Census Bureau in the 2007-09 American Community Survey (ACS) 3-year estimate for all housing units (both single family and multi-family units) and added to the city's existing housing stock as of April 1, 2000. This estimated number of housing units in High Point was then multiplied by the average household size of 2.45 persons per household from the 2007-09 ACS 3-year estimate to calculate the estimated population living in occupied housing units. This number was then added to the estimated population living in group quarters to calculate the total estimated population. It should be noted that the 2007-09 ACS 3-year estimate uses data sampling which results in a margin of error of approximately +/- 1.95% for the vacancy rate and +/- 0.06 for the persons per household figure. Detailed residential building permit data and related population calculations for Method 1 can be found in Attachment #1 at the end of this report.

Population Estimate (Method 1) -105,455

how state-shared tax revenues are distributed among municipalities.

Method 2 - State Estimate:

Based on the North Carolina Office of Budget and Management's most recent official estimate, High Point had a population of 102,214 as of July 1, 2009 (Source: Municipal Populations, 2009 available at: http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates.shtm). The state's procedure for estimating municipal population relies on annexation data obtained annually from each municipality. Pursuant to state law, this information is used to calculate the population of each of the state's municipalities for the year preceding the one in which the annexation data is obtained, so the state's municipal population estimates are always one year behind the year the results are published (i.e. the most recent estimate published in 2010 was for 2009). The resulting population estimates are used to determine

In estimating municipal populations, the state employs a constant proportion methodology, which assumes that the city grows at the same rate as the population of the county (or counties) in which they are located, in combination with a partitioned change method, which assumes that areas more recently annexed into a municipality grow at a different rate than the rest of the city. To help determine their population estimate, the state uses housing unit totals produced by the U.S. Census Bureau. In the past, the state used less reliable information, such as automobile registration, to estimate population, resulting in generally lower state municipal population estimates.

The Office of Budget and Management's 2009 population estimate of 102,214 for High Point reflects an overall increase of approximately 19.08% between April 1, 2000 and July 1, 2009 (111 months) or an average annual growth rate of 2.06% (per twelve months). This represents a constant monthly increase of 0.15742%. Assuming this monthly rate of increase has remained constant since July 1, 2009, High Point's April 1, 2011 population using the state estimate methodology is 105,647.

Population Estimate (Method 2) -105,647

Method 3 - Natural Increase/Migration Method:

Estimates of High Point's natural population increase (live births minus deaths) and net migration were obtained from certified county population estimates developed by the state's Office of Budget and Population Management (Source: 2009 Certified County Estimates available http://www.osbm.state.nc.us/ncosbm/facts and figures/socioeconomic data/population estimates.shtm). Information about the natural population increase was previously obtained from the North Carolina State Center for Health Statistics. However, the natural growth figures are now determined using the state Office of Budget and Management estimates, because this information is more readily available, unlike the method used in previous years. This also allowed the natural increase figure to be determined using the same source used to determine the net migration figure calculated for this method.

The most recent data available from the Office of Budget and Management indicates that the portion of Guilford County's estimated population increase between April 1, 2000 and July 1, 2009 attributable to natural growth is 22,862. The estimated population increases over the same time period attributable to natural growth for the other three counties containing portions of the City of High Point are estimated to be 4,466 for Davidson County; 18,112 for Forsyth County; and 5,728 for Randolph County. Using a constant proportion method, High Point, which represented 20.10602% of Guilford County's 2000 population, 0.78983% of Davidson County's 2000 population, 0.00196% of Forsyth County's 2000 population, and 0.01073% of Randolph County's 2000 population, would receive the same proportional share of each county's population increase attributable to natural growth. The resulting figures are prorated for the last nine months of 2000, all of 2001-2010, and the first three months of 2011, and amount to an increase of approximately 5,466 for Guilford County, 42 for Davidson County, 0 for Forsyth County, and 1 for Randolph County, for a total of 5,509.

Similarly, the estimated county population increases from April 2000 to July 2009 attributable to net migration were estimated to be 32,043 for Guilford County; 8,545 for Davidson County; 31,422 for Forsyth County; and 6,285 for Randolph County. Again using the constant proportion method and prorating the figures to April 1, 2011, High Point's population increase due to net migration was approximately 7,661 for Guilford County, 80 for Davidson County, 1 for Forsyth County, and 1 for Randolph County for a total of 7,743. Therefore, High Point's estimated April 1, 2011 population based on the natural increase/migration method includes the sum of its 2000 population (85,839), its estimated natural population growth since 2000 (5,466), and its estimated growth due to net migration since 2000 (7,743) for a total of 99,048. However, since this figure is less than High Point's official population of 104,371 as reported in the 2010 Census, the Natural Increase/Migration method (Method 3) is not considered appropriate for estimating High Point's population in 2011.

Population Estimate (Method 3) – 99,048 (Not Applicable)

Method 4 - U.S. Census Bureau Municipal Estimates:

The U.S. Census Bureau prepares annual population estimates for municipal jurisdictions by using housing unit estimates to distribute the county population to municipalities within each county. These housing unit estimates rely primarily on building permit data to update housing unit changes since the last census. The municipal estimates can be found at: http://www.census.gov/popest/cities/cities.html. The Census Bureau's most recent municipal estimate for the City of High Point is 103,368 as of July 1, 2009. This represents an average annual increase of approximately 2.21% since April 2000 and a constant monthly increase of 0.16755%. Assuming the monthly rate of increase has remained constant since July 1, 2009, High Point's April 1, 2011 population using the U.S. Census Bureau municipal estimate method is 107,067.

Population Estimate (Method 4) -107,067

Method 5 - U.S. Census Bureau County Estimates:

The U.S. Census Bureau also prepares annual population estimates for each county. These estimates can be found at http://www.census.gov/popest/estimates.html. The most recent figures indicate that Guilford County's population was estimated to be 483,915 as of July 1, 2010, representing an approximately 14.93% increase since April 1, 2000 and a monthly growth rate of 0.113205%. Assuming this monthly growth rate has remained constant since July 1, 2010, Guilford County's April 1, 2011 population would be 488,868. Using the constant proportion method, High Point, representing 20.10602% of Guilford County's 2000 population, would represent 20.10602% of the county's April 1, 2011 population, or 98,292. Similarly, High Point represented 0.78983% of Davidson County's 2000 population, 0.00196% of Forsyth County's 2000 population, and 0.01073% of Randolph County's 2000 population. After calculating the monthly growth rates for each of these counties, and assuming the monthly growth rates and proportions of total population have remained constant since 2000, High Point's share of the estimated April 1, 2011 population is 1,262 for Davidson County; 7 for Forsyth County; and 15 for Randolph County, resulting in a total population of 99,576 for High Point as of April 1, 2011. However, since this figure is less than High Point's official population of 104,371 as reported in the 2010 Census, the U.S. Census Bureau County Estimates method (Method 5) is not considered appropriate for estimating High Point's population in 2011.

Population Estimate (Method 5) – 99,576 (Not Applicable)

Method 6 - New Residences and 2010 Census:

This methodology combines High Point's April 1, 2010 population of <u>104,371</u> as reported in the 2010 Census with the estimated population growth during the period from April 1, 2010 to March 31, 2011 as a result of the net increase of 25 single family dwellings and 88 multi-family units calculated in Method 1. Using the 2010 Census vacancy rate of 12.4% and the average household size figure of 2.45 from the most recent American Community Survey (ACS) 3-year estimate for all housing units (both single family and multi-family units), it is estimated that the City's population grew by <u>243</u> as a result of the additional residences built since the 2010 Census, increasing the City's total population to <u>104,614</u>.

Population Estimate (Method 6) – 104,614

Method 7 – U.S. Census Straight-Line Projection:

This method examines the percentage of population growth between 2000 and 2010 as reported by the U.S. Census Bureau in the last two censuses and extends that same growth rate to April 1, 2011. High Point's 2010 population of 104,371 represents a growth rate of 21.59% since 2000 or a constant annual increase of 1.974%. Applying this rate for the period from April 1, 2010 to March 31, 2011 increases the City's population by 2,060 for a total of 106,431.

Population Estimate (Method 7) – $\underline{106,431}$

Attachment #1:

2011 POPULATION ESTIMATES BASED ON BUILDING PERMITS

Occupied

			Single Family Units			Multi- Family Units	Occupied Housing Units	Within Group Quarters
2000 Census			25,527			7,971	33,498	2,303
	New			New		Net		Total
	Single	Single	Net Single	Multi-	Multi-	Multi-		Population
Census Year	Family	Family	Family	Family	Family	Family	Total	Within
(April 1st thru	Units	Units	Housing	Units	Units	Housing	Housing	Group
March 31st)	Approved	Demolished	Units	Approved	Demolished	Units	Units	Quarters
2000-01	755	-66	689	70	-4	66	755	N/A
2001-02	926	-60	866	603	0	603	1,469	115
2002-03	891	-52	839	266	0	266	1,105	213
2003-04	817	-50	767	392	0	392	1,159	0
2004-05	892	-61	831	861	0	861	1,692	0
2005-06	1,044	-120	924	214	-140	74	998	418
2006-07	835	-104	731	72	0	72	803	0
2007-08	433	-82	351	361	0	361	712	508
2008-09	229	-90	139	120	0	120	259	16
2009-10	204	-73	131	80	0	80	211	0
2010-11	134	-109	25	88	0	88	113	84
Totals 2001 thru 2011	7,160	-867	6,293	3,127	-144	2,983	9,276	1,354
Grand Total (2001 thru 2011								
+ 2000 Census)	N/A	N/A	31,820	N/A	N/A	10,954	42,774	3,657
NET SINGLE FAMILY (DETACHED & ATTACHED) UNITS (2001 thru 2011): NET MULTI-FAMILY (APARTMENT) UNITS (2001 thru 2011): TOTALS:							6,293 2,983 9,276	67.8% 32.2%

 TOTALS:
 9,276
 100.0%

 OCCUPIED SINGLE FAMILY UNITS (2000 CENSUS):
 25,527
 76.2%

 OCCUPIED MULTI-FAMILY UNITS (2000 CENSUS):
 7,971
 23.8%

 TOTALS:
 33,498
 100.0%

2010-11 Total Housing Units Estimate = 33,498 + [9,276 - 13.2% (2007-09 ACS 3-yr. est. vacancy rate)] x 2.45 (2007-09 ACS 3-yr. est. avg. household size) = $\underline{101,798}$

April 2011 Total Estimated Population = $\underline{101,798} + \underline{3,657}$ (Estimated Group Quarters) = $\underline{105,455}$

Total

Population

Occupied

Total